DOCUMENT RESUME

ED 421 619 CE 076 812

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TITLE Application of Psychology of Learning to Tech Prep Education and Instruction.
PUB DATE 1998-00-00
NOTE 7p.
PUB TYPE Reports - Descriptive (141)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Behaviorism; *Classroom Techniques; *Educational Psychology; *Humanism; Humanistic Education; Learning Theories; Postsecondary Education; Secondary Education; Teaching Methods; *Tech Prep

ABSTRACT

The technical education instructor needs to emphasize certain tenets from the psychology of education in teaching-learning situations: meaningful learning; sequential experiences; success in student learning; purposeful activities; provision for individual differences among learners; knowledge, skills, and attitudinal goals to represent balance among objectives; and quality evaluation techniques to determine student progress. Two opposing psychologies may be used in instruction. Behaviorism, a management system of instruction, emphasizes use of measurably stated objectives in teaching-learning situations. After instruction, the technical education instructor determines if students individually have been successful in goal attainment. Reinforcement tends to shape student behavior in the desired direction. A second psychology of instruction to emphasize is humanism. Humanists believe a humane technical education curriculum is in the offing when students have input into developing objectives, learning opportunities, and evaluation procedures. They emphasize a psychological technical curriculum whereby the choice of sequence, with instructor guidance, resides within the student. The student and instructor cooperatively appraise the student's progress. (YLB)

APPLICATION OF PSYCHOLOGY OF LEARNING TO TECH PREP EDUCATION AND INSTRUCTION

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Technical education instructors need to follow desired tenets from the psychology of learning to aid each student to achieve optimally. To guide individual optimal achievement among students, the instructor needs to provide meaningful experiences. With meaning, learners understand what has been taught. Understanding of content and skills is necessary so that desirable attitudes are developed.Instructors then need to guide technical education students to attach meaning and understanding to ongoing tasks and experiences (Ediger, Philosophy in Curriculum Development, 1995, p. 100.).

Second, the technical education instructor needs to emphasize quality sequence in student learning. Learning opportunities in the order presented must harmonize with achievement and ability levels of students. With quality sequence, tasks are arranged in ascending order of complexity. Failure for students in learning is then greatly minimized. When a task becomes too complex, the technical education instructor needs to utilize the concepts of diagnosis and remediation. Thus, sequential learning opportunities might then follow again (Ediger, 1993).

Third, technical education students need to experience success in learning. Success in learning provides opportunities for instructors to emphasize reinforcement techniques. Rewards may then be given for definite standards of student achievement. Learners should know prior to instruction what to attain so that the appropriate rewards might be forthcoming. Selected instructors may wish to stress intrinsic motivation whereby learning is its own reward, rather than the use of reinforcement techniques of instruction. With intrinsic motivation, learning and achievement are their very own rewards (Ediger, 1988).

Fourth, students need guidance to perceive purpose in learning. With purpose, learners perceive reasons for achieving in technical

education. Inductive approaches whereby students are led by the instructor through questioning in developing perceived purpose to pursue a given task may be utilized.Deductive approaches may also be used. Here, the technical education instructor explains to students values of learning sequential tasks in ongoing lessons.

Fifth, individual differences among students need adequate provision. Students individually have diverse learning styles. A variety of activities and experiences should be in the offing. Concrete materials (life-like situations), semi-concrete methods (models, pictures, video-tapes and disks, films, and filmstrips),and abstract content might then provide learning opportunities for students. These three kinds of experiences may assist each student to attain more optimally in technical education (Ediger, 1996).

Sixth, the technical education instructor needs to emphasize three kinds of objectives in teaching-learning situations. Knowledge goals stress that students achieve vital facts, concepts, and generalizations. Skills objectives assist students to utilize knowledge in ongoing tasks. Knowledge goals can be implemented prior to specific skill development. Knowledge may also be acquired as skills are being achieved. Attitudinal ends guide learners in developing positive feelings, values, and purpose toward achieving knowledge and skill ends (Ediger, 1995, Philippine Education Quarterly, 224 (3), p.1).

Seventh, a quality program of student appraisal is a must. Intellectual development and growth of technical education students need thorough assessment. Emotional development needs appraisal to ascertain if each learner has increased positive attitudes toward the technical education arena. Social development is salient in that the student of today will be in the workplace of the societal arena tomorrow. Physical development needs appraisal to determine if the learner possesses increased stamina and agility for the demands of the world of work.

Psychologies of Instruction

Technical education instructors need to be thoroughly familiar with two schools of thought, as a minimum, from psychology.Behaviorism, a management system of instruction, emphasizes utilization of measurably stated objectives in teaching-learning situations. The objectives are stated in measurable terms and are written prior to instruction. Each objective, prior to instruction, may be clearly stated to the students. Students then understand what is expected of them as a result of instruction. After instruction, the technical education instructor determines if students individually have been successful in goal attainment. Either a student has or has not achieved sequential objectives.

The instructor may utilize praise as a principle of positive reinforcement. Reinforcement tends to shape student behavior in the desired direction. The objectives need to be arranged in ascending order of complexity by the technical education instructor. From the simple to the increasingly complex is an excellent rule to follow in ordering objectives. With quality sequence or order, students should be quite successful in goal attainment.

A second psychology of instruction to emphasize is humanism. Humanists believe a humane technical education curriculum is in the offing when students have input into developing objectives, learning opportunities, and evaluation procedures. Learners then need to have choices, from among alternatives. A predetermined technical education curriculum containing goals, activities, and appraisal procedures does not harmonize with humanism. Humanists, rather, emphasize a psychological technical curriculum whereby the choice of sequence, with instructor guidance, resides within the student. A psychological curriculum is then in evidence. A psychological technical education curriculum can then be compared with a logically developed program of instruction. The latter is organized prior to teaching and learning in which sequence is determined by the instructor.

A learning stations approach may be stressed to represent humanism as a psychology of instruction. With diverse stations and adequate number of tasks at each, the technical education student may select which station with its tasks to pursue. The instructor is a guide and stimulator, not a consistent dispenser of content and skills. The student needs to attain vital objectives, but may omit tasks perceived as lacking purpose and meaning. The student and the instructor cooperatively appraise the former's progress.

In Closing

The technical education instructor needs to emphasize the following tenets from the psychology of education in teaching-learning situations.

1. meaningful leanings
2. sequential experiences
3. success in student learning
4. purposeful activities
5. provision for individual differences among learners
6. knowledge, skills, and attitudinal goals to represent balance among objectives
7. quality evaluation techniques to determine student progress.

The Theory of Multiple Intelligences indicates that learners should be able to reveal progress in numerous ways in technical education (Gardner, 1993).

Two somewhat opposing psychologies of instruction may be utilized in instruction --- behaviorism and humanism. Desired tenants of each psychology must be selected to guide each student to attain optimally. The chosen tenets should guide students to appreciate and value technical education in school and society. Higher level knowledge or cognitive goals, such as critical and creative thinking, as well as problem solving, need adequate attention in the curriculum.

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